

ABSTRACT OF THE DISCLOSURE

The method comprises forming a layer comprised of BPSG above a substrate and a plurality of transistors, forming a dielectric layer above the BPSG layer, the dielectric layer comprised of a material having a dielectric constant greater than approximately 6.0, forming
5 a plurality of openings in the dielectric layer and the BPSG layer, each of the openings allowing contact to a doped region of one of the transistors, and forming a conductive local interconnect in each of the openings. In another embodiment, the method comprises forming a layer comprised of BPSG above the substrate and between the transistors, forming a local interconnect in openings formed in the BPSG layer, reducing a thickness of the BPSG layer
10 after the local interconnects are formed, and forming a dielectric layer above the BPSG layer and between the local interconnects, wherein the dielectric layer has a dielectric constant greater than approximately 6.0.